

SYSTEM AND METHOD FOR PROVIDING A RF PAYMENT SOLUTION TO A MOBILE DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This invention claims priority and the benefits of U.S. Provisional Application No. 60/512,297, filed Oct. 17, 2003. This invention is also a continuation-in-part of, and claims priority to, U.S. application Ser. No. 10/746,781, entitled "A SYSTEM AND METHOD FOR MANUFACTURING A PUNCH-OUT RF TRANSACTION DEVICE," filed Dec. 24, 2003. This invention is also a continuation-in-part of, and claims priority to, U.S. patent application Ser. No. 10/192,488, entitled "SYSTEM AND METHOD FOR PAYMENT USING RADIO FREQUENCY IDENTIFICATION IN CONTACT AND CONTACTLESS TRANSACTIONS," filed Jul. 9, 2002 (which itself claims priority to U.S. Provisional Patent Application No. 60/304,216, filed Jul. 10, 2001).

[0002] The invention is also a continuation-in-part of and claims priority, to U.S. patent application Ser. No. 10/340,352, entitled "SYSTEM AND METHOD FOR INCENTING PAYMENT USING RADIO FREQUENCY IDENTIFICATION IN CONTACT AND CONTACTLESS TRANSACTIONS," filed Jan. 10, 2003 (which itself claims priority to U.S. Provisional Patent Application No. 60/396,577, filed Jul. 16, 2002).

[0003] The entire contents of each of these applications is hereby incorporated by reference.

FIELD OF INVENTION

[0004] The present invention generally relates to transaction devices, and more particularly, to a system and method for providing a Radio Frequency Identification (RFID) transaction solution to a nontraditional transaction device.

BACKGROUND OF INVENTION

[0005] For many years, personal checks, travelers checks, money orders, traditional currency and the like were the most popular means for paying for goods or services. In recent years, however, transaction cards (e.g., credit cards, debit cards, smart cards, pre-paid cards, and the like), have developed as a popular substitute for cash or personal checks. The average consumer often prefers the transaction cards over traditional currency since the transaction cards may be easily replaced by the card issuer if the user loses or misplaces the card or the card is stolen.

[0006] As the number of issued transaction cards increases, so do the security issues surrounding transaction card transactions. As a consequence, the transaction card industry started to develop more sophisticated transaction cards which allowed for the reading, transmission, and authorization of transaction card data, while lessening the elevating security concerns. One alternative transaction card that has gained popularity is the smart card. Smart cards are capable of transferring user information during transaction completion without the user ever having to lose physical control of the device. Thus, smart cards enhance the security of the transactions by virtually eliminating the need for the user to hand the card over to a merchant salesperson for transaction completion.

[0007] While smart cards enhanced some security surrounding transaction devices, smart cards did little to address fraud issues associated with a lost or stolen transaction card. Because smart cards are manufactured with the same size dimensions as traditional transaction cards, the user did little more to secure the smart card against loss than the user did to secure a traditional credit card. This revelation has led transaction card providers to search for a suitable technology that encompassed the enhanced security given by smart cards and more. One such technology is radio frequency identification (RFID) technology.

[0008] Like barcode and voice data entry, RF is a contactless information acquisition technology. RF systems are wireless, and are usually extremely effective in hostile environments where conventional acquisition methods fail. In general, RF technology permits a card manufacturer to provide for a dimensionally smaller transaction device than a smart card or traditional transaction card. RF technology, therefore, is better suited for securing against loss or theft. For example, the RF technology may be embodied in a form factor attachable to the account holder's person or to an often used (or often handled) personal article, such as a key chain, fob or tag. The RF transaction device may be attached to the personal article in an unobtrusive manner because of its smaller size. As such, the user has increased security against loss or theft, since the user handles the personal article frequently, permitting the user to repeatedly be reminded that the card is present.

[0009] One of the more visible transaction devices which used RF technology is found in the introduction of Exxon/Mobil's Speedpass and Shell's EasyPay® products, which are attachable to a user's key chain. These products use RF transponders placed in a fob or tag of irregular shape which enables automatic identification of the user when the fob is presented at a merchant Point-of-Sale (POS) device. Fob identification data is typically passed to a third-party server database, where the identification data is referenced to a customer (e.g., user) credit or debit account for completion of a transaction.

[0010] By providing a RF transaction device (e.g., fob) as described above, transaction account providers are able to attract account users in increasing numbers. The account users often prefer account providers that offer the RF transaction device option because of the convenience of use and the security using a RF transaction fob provides. The increased popularity of the RF fob has not gone unnoticed. Transaction account providers are now looking for various other devices in which to place RF technology for convenient consumer use. These other devices may be devices that the consumer uses more frequently than a traditional credit card or smart card. One suitable device is the mobile telephone. Mobile telephones are typically connected to a telephone network using a wireless connection. Because of their portability, users frequently carry mobile telephones with them throughout their day. Users often take their mobile telephones with them to the office, in the car, and wherever they might go. In this manner, functions within the mobile telephone are available to the user throughout the day. Moreover, the portability of mobile telephones, elevates mobile telephones to an important piece of equipment in consumers' every day lives.

[0011] Another suitable device is the portable personal computer. As personal computers have increased in power